



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

**RBST2854-9**  
**Job Sheet 173097**



Part No: RBST2854-9

Job Qty: 4 ea

Part Name: Pin



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 2/26/18

Job Tracking No:

Due Date: 3/9/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBST2854 Rev 1 IPP Rev A 18.02.22 New issue DP Verify DD

Ship Via:

### Bill of Materials

### Job Routing

| Op No | Operation          | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off    |
|-------|--------------------|-------|------------|----------|-----------|---------|-----------------------|-----------|-------------|
|       |                    |       |            |          | Setup hrs | Run Hrs | Workcenter / Supplier | Lead Time |             |
| 90    | Start up Operation | 4 Ea  | 3/8/18     | 3/8/18   | 0.00      | 0.00    | Start Up Machining-3  |           | JB 18-04-12 |
| 110   | Lathe Conv         | 4 pcs | 3/8/18     | 3/8/18   | 0.00      | 2.00    | Lathe Conv-1          |           | JB 18-04-12 |
| 120   | QC                 | 4 pcs | 3/8/18     | 3/8/18   | 0.00      | 0.00    | QC2 Machining-4       |           | JB 18-04-12 |
| 130   | Mill Conv          | 4 pcs | 3/9/18     | 3/9/18   | 0.00      | 1.00    | Mill Conv 1           |           | JB 18-04-12 |
| 140   | QC                 | 4 pcs | 3/9/18     | 3/9/18   | 0.00      | 0.00    | QC2 Machining-4       |           | JB 18-04-12 |
| 150   | QC                 | 4 pcs | 3/9/18     | 3/9/18   | 0.00      | 0.00    | QC8 Machining-4       |           | JB 18-04-12 |
| 180   | Outsource          | 4 pcs | 3/9/18     | 3/9/18   | 0.00      | 0.00    | Outsource12           |           | CT-18-04-12 |
| 190   | Packaging          | 4 pcs | 3/9/18     | 3/9/18   | 0.00      | 0.00    | Packaging2            |           | AT 18/04/20 |
| 200   | QC                 | 4 pcs | 3/9/18     | 3/9/18   | 0.00      | 0.00    | QC6                   |           | JB          |
| 210   | Packaging          | 4 pcs | 3/9/18     | 3/9/18   | 0.00      | 0.00    | Packaging3-1          |           | APR 25 2018 |
| 220   | QC21-SA            | 4 Ea  | 3/9/18     | 3/9/18   | 0.00      | 0.00    | QC21                  |           | APR 26 2018 |

Part Op 110 - 1-Machine as per DWG. 2-Deburr

Descriptions: 180 - Issue P/O to Groupe Altech; PO 039590 -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required

### Job BOM

| Part / Item | Component Name                | Quantity    | Operation             | Container |
|-------------|-------------------------------|-------------|-----------------------|-----------|
| 98378A909   | Perforator Pin .129" X 2-1/2" | 4 Ea (1 ea) | 90-Start up Operation |           |

### Job Allocations

| Operation             | Component Part | Required | Inventory | Allocated |
|-----------------------|----------------|----------|-----------|-----------|
| 90-Start up Operation | 98378A909      | 4        | 5         | 0         |

### Part Specifications

Specifications could not be found.

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |                          |  |            |  |  |  |             |                          |                    |                          |        |                          |          |                          |          |                          |              |                          |               |                          |          |                          |              |                          |          |                          |          |                          |                 |                          |                    |                          |                  |                          |                  |                          |         |                          |     |                          |                     |                          |            |                          |                     |                          |                  |                          |                       |                          |               |                          |          |                          |               |  |  |  |
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| Date : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>MRB (QS1042) Approval</b><br><br>_____                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |  |            |  |  |  |             |                          |                    |                          |        |                          |          |                          |          |                          |              |                          |               |                          |          |                          |              |                          |          |                          |          |                          |                 |                          |                    |                          |                  |                          |                  |                          |         |                          |     |                          |                     |                          |            |                          |                     |                          |                  |                          |                       |                          |               |                          |          |                          |               |  |  |  |
| <b>Description Work</b><br><br><div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> <p style="font-size: small;">Dart Aerospace Ltd.<br/>1270 Aberdeen Street<br/>Hawkesbury, ON K6A 1K7<br/>CANADA<br/>TEL.: 1 613 632-5200<br/>Email: sales@dartaero.com<br/>www.dartaerospace.com</p> </div> <div style="width: 50%; text-align: center;"> <br/> <b>Container No: S060235</b><br/> <b>Part: RBST2854-9</b><br/> <b>Job No: 173097</b><br/> <b>Serial No/Batch: S060235</b><br/> <b>Revision: 1</b><br/> <b>Inspector:</b> _____         </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                   | <b>Completed By</b><br><br>_____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          |  |            |  |  |  |             |                          |                    |                          |        |                          |          |                          |          |                          |              |                          |               |                          |          |                          |              |                          |          |                          |          |                          |                 |                          |                    |                          |                  |                          |                  |                          |         |                          |     |                          |                     |                          |            |                          |                     |                          |                  |                          |                       |                          |               |                          |          |                          |               |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                   | <b>Lead hand / Supervisor Approval Verification</b><br><br>_____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          |  |            |  |  |  |             |                          |                    |                          |        |                          |          |                          |          |                          |              |                          |               |                          |          |                          |              |                          |          |                          |          |                          |                 |                          |                    |                          |                  |                          |                  |                          |         |                          |     |                          |                     |                          |            |                          |                     |                          |                  |                          |                       |                          |               |                          |          |                          |               |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                   | <b>QC / QA Coordinator Approval</b><br><br>_____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          |  |            |  |  |  |             |                          |                    |                          |        |                          |          |                          |          |                          |              |                          |               |                          |          |                          |              |                          |          |                          |          |                          |                 |                          |                    |                          |                  |                          |                  |                          |         |                          |     |                          |                     |                          |            |                          |                     |                          |                  |                          |                       |                          |               |                          |          |                          |               |  |  |  |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: left; padding: 5px;">Root Cause</th> </tr> </thead> <tbody> <tr> <td style="width: 15%;">Environment</td> <td style="width: 15%;"><input type="checkbox"/></td> <td style="width: 15%;">No Re-verification</td> <td style="width: 15%;"><input type="checkbox"/></td> </tr> <tr> <td>Design</td> <td><input type="checkbox"/></td> <td>Operator</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Doc/Data</td> <td><input type="checkbox"/></td> <td>Offset/Setup</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Equip/Tooling</td> <td><input type="checkbox"/></td> <td>Supplier</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Handling/Pre</td> <td><input type="checkbox"/></td> <td>Training</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Material</td> <td><input type="checkbox"/></td> <td>Use for Testing</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Internal Transport</td> <td><input type="checkbox"/></td> <td>Poor Information</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Tribal Knowledge</td> <td><input type="checkbox"/></td> <td>Rushing</td> <td><input type="checkbox"/></td> </tr> <tr> <td>LOA</td> <td><input type="checkbox"/></td> <td>Product Improvement</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Substation</td> <td><input type="checkbox"/></td> <td>Process Improvement</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Past Expiry Date</td> <td><input type="checkbox"/></td> <td>Manufacturing Process</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Misidentified</td> <td><input type="checkbox"/></td> <td>Past Due</td> <td><input type="checkbox"/></td> </tr> <tr> <td colspan="4" style="padding: 5px;">           OTHER : _____         </td> </tr> </tbody> </table> |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |  | Root Cause |  |  |  | Environment | <input type="checkbox"/> | No Re-verification | <input type="checkbox"/> | Design | <input type="checkbox"/> | Operator | <input type="checkbox"/> | Doc/Data | <input type="checkbox"/> | Offset/Setup | <input type="checkbox"/> | Equip/Tooling | <input type="checkbox"/> | Supplier | <input type="checkbox"/> | Handling/Pre | <input type="checkbox"/> | Training | <input type="checkbox"/> | Material | <input type="checkbox"/> | Use for Testing | <input type="checkbox"/> | Internal Transport | <input type="checkbox"/> | Poor Information | <input type="checkbox"/> | Tribal Knowledge | <input type="checkbox"/> | Rushing | <input type="checkbox"/> | LOA | <input type="checkbox"/> | Product Improvement | <input type="checkbox"/> | Substation | <input type="checkbox"/> | Process Improvement | <input type="checkbox"/> | Past Expiry Date | <input type="checkbox"/> | Manufacturing Process | <input type="checkbox"/> | Misidentified | <input type="checkbox"/> | Past Due | <input type="checkbox"/> | OTHER : _____ |  |  |  |
| Root Cause                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |  |            |  |  |  |             |                          |                    |                          |        |                          |          |                          |          |                          |              |                          |               |                          |          |                          |              |                          |          |                          |          |                          |                 |                          |                    |                          |                  |                          |                  |                          |         |                          |     |                          |                     |                          |            |                          |                     |                          |                  |                          |                       |                          |               |                          |          |                          |               |  |  |  |
| Environment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <input type="checkbox"/>                                                                                                          | No Re-verification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <input type="checkbox"/> |  |            |  |  |  |             |                          |                    |                          |        |                          |          |                          |          |                          |              |                          |               |                          |          |                          |              |                          |          |                          |          |                          |                 |                          |                    |                          |                  |                          |                  |                          |         |                          |     |                          |                     |                          |            |                          |                     |                          |                  |                          |                       |                          |               |                          |          |                          |               |  |  |  |
| Design                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <input type="checkbox"/>                                                                                                          | Operator                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <input type="checkbox"/> |  |            |  |  |  |             |                          |                    |                          |        |                          |          |                          |          |                          |              |                          |               |                          |          |                          |              |                          |          |                          |          |                          |                 |                          |                    |                          |                  |                          |                  |                          |         |                          |     |                          |                     |                          |            |                          |                     |                          |                  |                          |                       |                          |               |                          |          |                          |               |  |  |  |
| Doc/Data                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <input type="checkbox"/>                                                                                                          | Offset/Setup                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <input type="checkbox"/> |  |            |  |  |  |             |                          |                    |                          |        |                          |          |                          |          |                          |              |                          |               |                          |          |                          |              |                          |          |                          |          |                          |                 |                          |                    |                          |                  |                          |                  |                          |         |                          |     |                          |                     |                          |            |                          |                     |                          |                  |                          |                       |                          |               |                          |          |                          |               |  |  |  |
| Equip/Tooling                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <input type="checkbox"/>                                                                                                          | Supplier                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <input type="checkbox"/> |  |            |  |  |  |             |                          |                    |                          |        |                          |          |                          |          |                          |              |                          |               |                          |          |                          |              |                          |          |                          |          |                          |                 |                          |                    |                          |                  |                          |                  |                          |         |                          |     |                          |                     |                          |            |                          |                     |                          |                  |                          |                       |                          |               |                          |          |                          |               |  |  |  |
| Handling/Pre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <input type="checkbox"/>                                                                                                          | Training                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <input type="checkbox"/> |  |            |  |  |  |             |                          |                    |                          |        |                          |          |                          |          |                          |              |                          |               |                          |          |                          |              |                          |          |                          |          |                          |                 |                          |                    |                          |                  |                          |                  |                          |         |                          |     |                          |                     |                          |            |                          |                     |                          |                  |                          |                       |                          |               |                          |          |                          |               |  |  |  |
| Material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <input type="checkbox"/>                                                                                                          | Use for Testing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <input type="checkbox"/> |  |            |  |  |  |             |                          |                    |                          |        |                          |          |                          |          |                          |              |                          |               |                          |          |                          |              |                          |          |                          |          |                          |                 |                          |                    |                          |                  |                          |                  |                          |         |                          |     |                          |                     |                          |            |                          |                     |                          |                  |                          |                       |                          |               |                          |          |                          |               |  |  |  |
| Internal Transport                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <input type="checkbox"/>                                                                                                          | Poor Information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <input type="checkbox"/> |  |            |  |  |  |             |                          |                    |                          |        |                          |          |                          |          |                          |              |                          |               |                          |          |                          |              |                          |          |                          |          |                          |                 |                          |                    |                          |                  |                          |                  |                          |         |                          |     |                          |                     |                          |            |                          |                     |                          |                  |                          |                       |                          |               |                          |          |                          |               |  |  |  |
| Tribal Knowledge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <input type="checkbox"/>                                                                                                          | Rushing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <input type="checkbox"/> |  |            |  |  |  |             |                          |                    |                          |        |                          |          |                          |          |                          |              |                          |               |                          |          |                          |              |                          |          |                          |          |                          |                 |                          |                    |                          |                  |                          |                  |                          |         |                          |     |                          |                     |                          |            |                          |                     |                          |                  |                          |                       |                          |               |                          |          |                          |               |  |  |  |
| LOA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/>                                                                                                          | Product Improvement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <input type="checkbox"/> |  |            |  |  |  |             |                          |                    |                          |        |                          |          |                          |          |                          |              |                          |               |                          |          |                          |              |                          |          |                          |          |                          |                 |                          |                    |                          |                  |                          |                  |                          |         |                          |     |                          |                     |                          |            |                          |                     |                          |                  |                          |                       |                          |               |                          |          |                          |               |  |  |  |
| Substation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <input type="checkbox"/>                                                                                                          | Process Improvement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <input type="checkbox"/> |  |            |  |  |  |             |                          |                    |                          |        |                          |          |                          |          |                          |              |                          |               |                          |          |                          |              |                          |          |                          |          |                          |                 |                          |                    |                          |                  |                          |                  |                          |         |                          |     |                          |                     |                          |            |                          |                     |                          |                  |                          |                       |                          |               |                          |          |                          |               |  |  |  |
| Past Expiry Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <input type="checkbox"/>                                                                                                          | Manufacturing Process                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <input type="checkbox"/> |  |            |  |  |  |             |                          |                    |                          |        |                          |          |                          |          |                          |              |                          |               |                          |          |                          |              |                          |          |                          |          |                          |                 |                          |                    |                          |                  |                          |                  |                          |         |                          |     |                          |                     |                          |            |                          |                     |                          |                  |                          |                       |                          |               |                          |          |                          |               |  |  |  |
| Misidentified                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <input type="checkbox"/>                                                                                                          | Past Due                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <input type="checkbox"/> |  |            |  |  |  |             |                          |                    |                          |        |                          |          |                          |          |                          |              |                          |               |                          |          |                          |              |                          |          |                          |          |                          |                 |                          |                    |                          |                  |                          |                  |                          |         |                          |     |                          |                     |                          |            |                          |                     |                          |                  |                          |                       |                          |               |                          |          |                          |               |  |  |  |
| OTHER : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |  |            |  |  |  |             |                          |                    |                          |        |                          |          |                          |          |                          |              |                          |               |                          |          |                          |              |                          |          |                          |          |                          |                 |                          |                    |                          |                  |                          |                  |                          |         |                          |     |                          |                     |                          |            |                          |                     |                          |                  |                          |                       |                          |               |                          |          |                          |               |  |  |  |

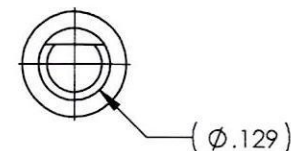
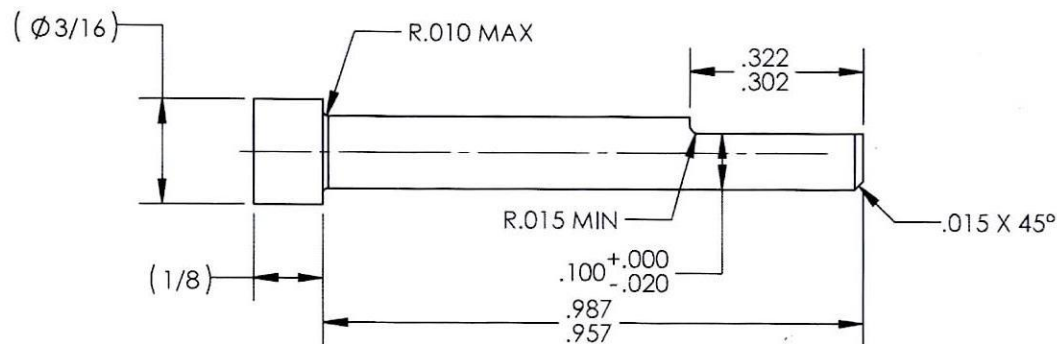
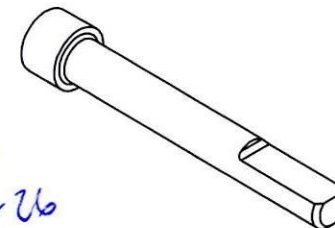




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| REVISIONS |         |                                                                     |            |         |          |
|-----------|---------|---------------------------------------------------------------------|------------|---------|----------|
| REV       | ECR     | DESCRIPTION                                                         | DATE       | INITIAL | APPROVED |
| 1         | 14-0185 | -9 CH'D DIM WAS Ø.241 IS (Ø.188), WAS Ø.129 +.000 -.001 IS (Ø.129). | 10/15/2014 | DJN     | JAG      |

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO 173097 MWS  
1802-26



1.107

⑨

PIN

|                                                        |                          |
|--------------------------------------------------------|--------------------------|
| <b>DART</b><br>AEROSPACE                               |                          |
| TITLE<br><b>TRI-ROLLER SWAGING TOOL</b>                |                          |
| DWG NO.<br><b>RBST2854-9</b>                           | REV<br><b>1</b>          |
| MAT'L STEEL                                            | DRAWN BY: <b>GILBERT</b> |
| UNLESS OTHERWISE SPECIFIED<br>DIMENSIONS ARE IN INCHES | APPROVED <i>D. Weir</i>  |
| .XXX ± .005 FRACTIONS ± 1/8                            | HEAT TREAT               |
| .XX ± .01 ANGLES ± 5°                                  | FINISH                   |
| .X ± .1                                                | SPEC                     |
| 1. BREAK ALL SHARP EDGES .015 x 45°<br>OR .015R        | USED ON MODEL            |
| 2. DIMENSIONAL LIMITS APPLY AFTER<br>PLATING           | <b>212-310-701-103</b>   |
| SCALE <b>3:1</b>                                       | DATE <b>5/20/2013</b>    |
| SHEET 6 OF 10                                          |                          |

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |                                             |                                                                                                                                                                                    |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                           |                                 |                                   |                                              |                                 |                                        |                                             |                                   |                                       |                                                |                                    |                                |                                               |                                        |                                   |                                 |                                               |                               |                                         |                                       |                                   |                                                 |                                                            |                                             |                                            |                                   |                                          |                                |                                        |                                          |                                     |                                             |                                           |                                   |                                      |                                  |                                  |                                           |                                  |                                     |                                        |                                     |                                 |                              |                                              |                                             |                                                          |                                       |                                  |                                     |                                              |                                        |                                      |                                                |                                           |                                           |                                                |               |  |  |  |
|--------------------------------------------------------------|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|---------------------------------|-----------------------------------|----------------------------------------------|---------------------------------|----------------------------------------|---------------------------------------------|-----------------------------------|---------------------------------------|------------------------------------------------|------------------------------------|--------------------------------|-----------------------------------------------|----------------------------------------|-----------------------------------|---------------------------------|-----------------------------------------------|-------------------------------|-----------------------------------------|---------------------------------------|-----------------------------------|-------------------------------------------------|------------------------------------------------------------|---------------------------------------------|--------------------------------------------|-----------------------------------|------------------------------------------|--------------------------------|----------------------------------------|------------------------------------------|-------------------------------------|---------------------------------------------|-------------------------------------------|-----------------------------------|--------------------------------------|----------------------------------|----------------------------------|-------------------------------------------|----------------------------------|-------------------------------------|----------------------------------------|-------------------------------------|---------------------------------|------------------------------|----------------------------------------------|---------------------------------------------|----------------------------------------------------------|---------------------------------------|----------------------------------|-------------------------------------|----------------------------------------------|----------------------------------------|--------------------------------------|------------------------------------------------|-------------------------------------------|-------------------------------------------|------------------------------------------------|---------------|--|--|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ |                                             | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> |                                           | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>             Skid-tube <input type="checkbox"/><br/>             Machining <input type="checkbox"/><br/>             Thermoforming <input type="checkbox"/><br/>             Large Fab <input type="checkbox"/> </div> <div>             Cross tube <input type="checkbox"/><br/>             Small Fab <input type="checkbox"/><br/>             Finishing <input type="checkbox"/><br/>             Composite <input type="checkbox"/> </div> <div>             Water Jet <input type="checkbox"/><br/>             Prod. Eng. Coord. <input type="checkbox"/><br/>             Rec/Store/Packaging <input type="checkbox"/><br/>             Supplier <input type="checkbox"/> </div> <div>             Engineering <input type="checkbox"/><br/>             Quality <input type="checkbox"/><br/>             Other <input type="checkbox"/> </div> </div> |                                           |                                 |                                   |                                              |                                 |                                        |                                             |                                   |                                       |                                                |                                    |                                |                                               |                                        |                                   |                                 |                                               |                               |                                         |                                       |                                   |                                                 |                                                            |                                             |                                            |                                   |                                          |                                |                                        |                                          |                                     |                                             |                                           |                                   |                                      |                                  |                                  |                                           |                                  |                                     |                                        |                                     |                                 |                              |                                              |                                             |                                                          |                                       |                                  |                                     |                                              |                                        |                                      |                                                |                                           |                                           |                                                |               |  |  |  |
| Date :                                                       |                                             | Step #:                                                                                                                                                                            |                                           | QTY Effective :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                           |                                 | MRB (QSI042) Approval             |                                              |                                 |                                        |                                             |                                   |                                       |                                                |                                    |                                |                                               |                                        |                                   |                                 |                                               |                               |                                         |                                       |                                   |                                                 |                                                            |                                             |                                            |                                   |                                          |                                |                                        |                                          |                                     |                                             |                                           |                                   |                                      |                                  |                                  |                                           |                                  |                                     |                                        |                                     |                                 |                              |                                              |                                             |                                                          |                                       |                                  |                                     |                                              |                                        |                                      |                                                |                                           |                                           |                                                |               |  |  |  |
| Description Work Order Deviation                             |                                             |                                                                                                                                                                                    |                                           | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                           |                                 |                                   | Completed By                                 |                                 |                                        |                                             |                                   |                                       |                                                |                                    |                                |                                               |                                        |                                   |                                 |                                               |                               |                                         |                                       |                                   |                                                 |                                                            |                                             |                                            |                                   |                                          |                                |                                        |                                          |                                     |                                             |                                           |                                   |                                      |                                  |                                  |                                           |                                  |                                     |                                        |                                     |                                 |                              |                                              |                                             |                                                          |                                       |                                  |                                     |                                              |                                        |                                      |                                                |                                           |                                           |                                                |               |  |  |  |
|                                                              |                                             |                                                                                                                                                                                    |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                           |                                 |                                   | Lead hand / Supervisor Approval Verification |                                 |                                        |                                             |                                   |                                       |                                                |                                    |                                |                                               |                                        |                                   |                                 |                                               |                               |                                         |                                       |                                   |                                                 |                                                            |                                             |                                            |                                   |                                          |                                |                                        |                                          |                                     |                                             |                                           |                                   |                                      |                                  |                                  |                                           |                                  |                                     |                                        |                                     |                                 |                              |                                              |                                             |                                                          |                                       |                                  |                                     |                                              |                                        |                                      |                                                |                                           |                                           |                                                |               |  |  |  |
|                                                              |                                             |                                                                                                                                                                                    |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                           |                                 |                                   | QC / QA Coordinator Approval                 |                                 |                                        |                                             |                                   |                                       |                                                |                                    |                                |                                               |                                        |                                   |                                 |                                               |                               |                                         |                                       |                                   |                                                 |                                                            |                                             |                                            |                                   |                                          |                                |                                        |                                          |                                     |                                             |                                           |                                   |                                      |                                  |                                  |                                           |                                  |                                     |                                        |                                     |                                 |                              |                                              |                                             |                                                          |                                       |                                  |                                     |                                              |                                        |                                      |                                                |                                           |                                           |                                                |               |  |  |  |
|                                                              |                                             |                                                                                                                                                                                    |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                           |                                 |                                   |                                              |                                 |                                        |                                             |                                   |                                       |                                                |                                    |                                |                                               |                                        |                                   |                                 |                                               |                               |                                         |                                       |                                   |                                                 |                                                            |                                             |                                            |                                   |                                          |                                |                                        |                                          |                                     |                                             |                                           |                                   |                                      |                                  |                                  |                                           |                                  |                                     |                                        |                                     |                                 |                              |                                              |                                             |                                                          |                                       |                                  |                                     |                                              |                                        |                                      |                                                |                                           |                                           |                                                |               |  |  |  |
| Root Cause                                                   |                                             | FAULT CATEGORY                                                                                                                                                                     |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                           |                                 |                                   |                                              |                                 |                                        |                                             |                                   |                                       |                                                |                                    |                                |                                               |                                        |                                   |                                 |                                               |                               |                                         |                                       |                                   |                                                 |                                                            |                                             |                                            |                                   |                                          |                                |                                        |                                          |                                     |                                             |                                           |                                   |                                      |                                  |                                  |                                           |                                  |                                     |                                        |                                     |                                 |                              |                                              |                                             |                                                          |                                       |                                  |                                     |                                              |                                        |                                      |                                                |                                           |                                           |                                                |               |  |  |  |
| Environment <input type="checkbox"/>                         | No Re-verification <input type="checkbox"/> | Pressure/Forced <input type="checkbox"/>                                                                                                                                           | Temperature/Cure <input type="checkbox"/> | Power Loss/Surge <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Positioned Wrong <input type="checkbox"/> | Design <input type="checkbox"/> | Operator <input type="checkbox"/> | Bending <input type="checkbox"/>             | Set-up <input type="checkbox"/> | Folio/Program <input type="checkbox"/> | Outside Dimensions <input type="checkbox"/> | Doc/Data <input type="checkbox"/> | Offset/Setup <input type="checkbox"/> | Centre Not Concentric <input type="checkbox"/> | BOM/Route <input type="checkbox"/> | Grain <input type="checkbox"/> | Over/Under tolerance <input type="checkbox"/> | Equip/Tooling <input type="checkbox"/> | Supplier <input type="checkbox"/> | Cracks <input type="checkbox"/> | Broken/Damage/Defect <input type="checkbox"/> | Weld <input type="checkbox"/> | Part Incorrect <input type="checkbox"/> | Handling/Pre <input type="checkbox"/> | Training <input type="checkbox"/> | Crimp/Kink/Ripple/Wave <input type="checkbox"/> | Inspection Incomplete/Unqualified <input type="checkbox"/> | Wrong Stock Pulled <input type="checkbox"/> | Part Lost/Missing <input type="checkbox"/> | Material <input type="checkbox"/> | Use for Testing <input type="checkbox"/> | Cuffs <input type="checkbox"/> | Contamination <input type="checkbox"/> | Out of Sequence <input type="checkbox"/> | Part Moved <input type="checkbox"/> | Internal Transport <input type="checkbox"/> | Poor Information <input type="checkbox"/> | Crushing <input type="checkbox"/> | Countersink <input type="checkbox"/> | Off-set <input type="checkbox"/> | Drawing <input type="checkbox"/> | Tribal Knowledge <input type="checkbox"/> | Rushing <input type="checkbox"/> | Heat Treat <input type="checkbox"/> | Cut Too Short <input type="checkbox"/> | Mislabeled <input type="checkbox"/> | Finish <input type="checkbox"/> | LOA <input type="checkbox"/> | Product Improvement <input type="checkbox"/> | Wave/Twist in Tube <input type="checkbox"/> | Instructions Incomplete/Unclear <input type="checkbox"/> | Fit/Function <input type="checkbox"/> | Misread <input type="checkbox"/> | Substation <input type="checkbox"/> | Process Improvement <input type="checkbox"/> | Marks/Chatter <input type="checkbox"/> | Drill Holes <input type="checkbox"/> | Misaligned/off center <input type="checkbox"/> | Turning Sequence <input type="checkbox"/> | Past Expiry Date <input type="checkbox"/> | Manufacturing Process <input type="checkbox"/> | OTHER : _____ |  |  |  |
| Misidentified <input type="checkbox"/>                       | Past Due <input type="checkbox"/>           |                                                                                                                                                                                    |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                           |                                 |                                   |                                              |                                 |                                        |                                             |                                   |                                       |                                                |                                    |                                |                                               |                                        |                                   |                                 |                                               |                               |                                         |                                       |                                   |                                                 |                                                            |                                             |                                            |                                   |                                          |                                |                                        |                                          |                                     |                                             |                                           |                                   |                                      |                                  |                                  |                                           |                                  |                                     |                                        |                                     |                                 |                              |                                              |                                             |                                                          |                                       |                                  |                                     |                                              |                                        |                                      |                                                |                                           |                                           |                                                |               |  |  |  |





Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# PURCHASE ORDER

## PO039590

**Supplier:** GRO002-VC  
Group Altech  
2455 Halpern  
St Laurent  
QC  
H4S 1N9 Canada  
Phone: 514-335-3666  
Fax: 514-335-3868

**PO No:** PO039590  
**PO Date:** 4/12/18  
**Due Date:** 4/19/18  
**Purchase Order Revision:**  
**Revision Date:**  
**Ship-To Contact:** Tsimiklis, ChrisoulaPhone:

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Via:** Ground  
**Pynt Terms:** Net 30  
**Freight Terms:**  
**Special Comments:**

### Items

| Line Item                                        | Job    | Part         | Description                                                                                                                                                       | Status | Due Date | Order Quantity | Received Quantity | Balance | Unit Price (CAD)             | Extended Price  |
|--------------------------------------------------|--------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------|----------------|-------------------|---------|------------------------------|-----------------|
| 1                                                | 170787 | D5553-1      | Bracket<br>ISSUE<br>P/O:<br>ANODIZE BLACK<br>PER MIL-A-8625F<br>TYPE I OR IB OR IC<br>OR II OR IIB CLASS<br>2 C OF C IS<br>REQUIRED                               | Firmed | 4/17/18  | 11 pcs         | 0 pcs<br>✓ 11x    | 11 pcs  | \$10.90909/pcs<br>✓ 11/10/18 | \$120.00        |
| <b>Line Item Note</b> ** big rush - need asap ** |        |              |                                                                                                                                                                   |        |          |                |                   |         |                              |                 |
| 2                                                | 173097 | RBST2854-9   | Pin<br>Issue P/O to Groupe<br>Altech;<br>PO<br>-Black oxide finish,<br>MIL-C-13924C Class<br>1<br>-Certificate of<br>Conformity is<br>required                    | Firmed | 4/17/18  | 4 pcs          | 0 pcs<br>✓ 4x     | 4 pcs   | \$30.00/pcs<br>✓ 11/10/18    | \$120.00        |
| 3                                                | 175103 | RB8813152000 | Rear Bearing Tool<br>-Issue P/O to Groupe<br>Altech: P/O<br>-Zinc plate, ASTM<br>B633 TYPE 2 SC2<br>-Color yellow<br>-Certificate of<br>Conformity is<br>required | Firmed | 4/17/18  | 3 pcs          | 0 pcs<br>✓ 3x     | 3 pcs   | \$30.00/pcs<br>✓ 11/10/18    | \$90.00         |
| <b>Grand Total:</b>                              |        |              |                                                                                                                                                                   |        |          |                |                   |         |                              | <b>\$330.00</b> |

### Order Notes

## Order Notes

## Procurement Quality Clauses

A005 right of entry  
A012 chemical and physical test report  
A016 personnel qualification  
A017 raw material identification (as applicable)

A022 Apical Processing  
A024 process certifications  
A026 certification of material conformance

A041 quality management system  
A042 dart notification by supplier  
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Plex 4/16/18 11:05 AM dart.tsimiklis.chrisoula



# Certificat de Conformité / Certificate of Compliance

(008402-2)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9  
 Tel: 514-335-3666 Fax: 514-335-3868  
 www.groupaltech.com

## Bon de Livraison / Packing Slip

**008402 - 2**

Livré à / Ship to

**DART AEROSPACE LTD**  
 1270 ABERDEEN STREET  
 HAWKESBURY, ON, K6A1K7  
 CANADA  
 Tel.: 613-632-5200 Fax.:

Client / Customer:

**DART AEROSPACE LTD**  
 1270 ABERDEEN STREET  
 HAWKESBURY, ON, K6A1K7  
 CANADA  
 BUYER:

| Date expédition<br>Ship date |                                                                            | Créé Par<br>Generated By                                                            | Transport / No de Compte<br>Courtier / Acc. No. | Bon de commande Client<br>Customer Purchase Order No. |                 |                   |               |                        |
|------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------------------|-----------------|-------------------|---------------|------------------------|
| 19-Apr-2018                  |                                                                            | Aman                                                                                |                                                 | 039590                                                |                 |                   |               |                        |
| #Ligne<br>Line#              | No. de Série / # Pièce<br>Part Number / Line Item Details<br>Job # / Ref # | Description pièce(s)                                                                | CATG.<br>U/M                                    | Comm.<br>/Ordered                                     | Exp/<br>Shipped | Qté NC/<br>NC Qty | Qté<br>Scrap/ | À venir/<br>Back Order |
| 1                            | D5553-1<br>Rev.                                                            | D5553-1<br>ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II<br>OR IIB CLASS 2 | ANODIZE<br>CH                                   | 11                                                    | 11              | 0                 | 0             | 0                      |
| 2                            | RBST2854-9<br>Rev.                                                         | RBST2854-9<br>BLACK OXIDE FINISH MIL-C-13924C CLASS 1                               | BLACK-OXIDE<br>CH                               | 4                                                     | 4               | 0                 | 0             | 0                      |

### Notes Additionnelles / Additional Notes

Epaisseur réelle  
Actual Thickness

Inspecteur Qualité  
Quality Inspector

Réçu par  
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.  
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.  
 Our financial and legal responsibility will not be higher than the amount of invoice.